

Work Order ID 146710

May 20, 2016 2:35:16 PM

PRELIMINARY ISSUE

146710

June 22

Page 1

Item ID: D2842-043
 Revision ID: PRELIM
 Item Name: Step Assembly, LH, 206 Float (PHI)
 Start Date: 5/24/2016 Start Qty: 1.00
 Required Date: 6/30/2016 Req'd Qty: 1.00
 Reference:

Accept *N9000040100* Setup Start *NS1*
 Stop *NS2*

Cust Item ID:
 Customer:

Approvals: Process Plan: SU Date: 20160520 Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*
 Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2842	PREL C								
100	Large Fab	0.00							
100	Large Fab	0.50							
Large Fab	Memo								
	1-Cut D2842-1 using D2622 extrusion as per Dwg D2842								
	2-Deburr and bevel ends for welding								
110	QC6- Inspect dimensions to drawing	0.00							
110	QC	0.00							
Quality Control	Memo								
120	Weld per dwg A/R Aluminum rod Batch: <u>M131562</u>	0.00							
120	Large Fab	0.99							
Large Fab	Memo								
	1-Weld one end cap and (2) lugs using Jig DT10038 as per Dwg D2842								
	2-Grind end cap weld flush								

16-6-6

DAS
19
9-89

DAS
18
9-89

1 8 16-06-07

1 8 3E 16-06-07

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

Work Order ID 146710

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Item ID: D2842-043 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: PRELIM Stop ***NS2***
Item Name: Step Assembly, LH, 206 Float (PHI)
Start Date: 5/24/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 6/30/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC9- Inspect visual per QSI004- Fusion Welds	0.00							
130									
QC	Memo	0.00				①	16-06-07		DAS 9 9-89
Quality Control									
140	QC5- Inspect part completeness to step on W/O	0.00							
140									
QC	Memo	0.02				①	16-06-07		DAS 9 9-89
Quality Control									
150	Chemical Conversion Coat per QSI005 4.1	0.00							
150									
HandFinish	Memo	0.49							
Hand Finishing									16-6-7 

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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Stop ***NS2***

Cust Item ID:
Customer:

Run	Start	*NR1*
	Stop	*NR2*

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Work Order ID 146710

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Item ID: D2842-043 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: PRELIM Stop ***NS2***
Item Name: Step Assembly, LH, 206 Float (PHI)
Start Date: 5/24/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 6/30/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC5- Inspect part completeness to step on W/O	0.00							
190									
QC	Memo	0.02				①	16-06-09		DAS 9 9-89
Quality Control									
191	Pressure Wash per QSI005 4.3	0.00							
191									
HandFinish	Memo	0.16							
Hand Finishing	***Touch up step with alodine per qsi 005 prior to powder coat***								
200	Spray Painting per QSI005 4.2	0.00							
200									
SprayPaint	Memo	0.14							
Spray Painting	SPRAY PAINT AS PER NOTE 2								

Primer 135929
Paint 135519

DAS
41
9-89

17-1-16

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER :			
Misidentified ☐		Past Due ☐					

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Item ID: D2842-043
Revision ID: PRELIM
Item Name: Step Assembly, LH, 206 Float (PHI)
Start Date: 5/24/2016 **Start Qty:** 1.00
Required Date: 6/30/2016 **Req'd Qty:** 1.00
Reference:

Accept

N900040100

```

Setup  Start  *NS1*
      Stop   *NS2*

```

Cust Item ID:
Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run	Start	*NR1*
	Stop	*NR2*

[illegible]

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling ☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre ☐	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material ☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport ☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge ☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA ☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation ☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date ☐	☐	Manufacturing Process	☐	OTHER :			
Misidentified ☐	☐	Past Due	☐				

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Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run** **Start** ***NR1***
 QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240	Identify as per dwg & Stock Location <i>pk</i>	0.00							
240									
Packaging	Memo	0.01							<i>DAS</i> <i>68-86</i> <i>99-89</i> <i>DAS</i>
Packaging									
									POSITIVE RECALL EFFECTIVE <i>DAS</i> AUTH _____ RELEASED <i>9</i> DATE <i>17-01-19</i> <i>9-89</i> <i>at rsc</i>
250	QC21 - Final Inspection - Work Order Release	0.00							
250									
QC	Memo	0.10							<i>17/3/14</i> <i>[Signature]</i>
Quality Control									<i>DAS</i> <i>21</i> <i>9-89</i> MAR 13 2017



Work Order update only

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework Scrap Use-as-is Suspected Unapproved		AGAINST DEPARTMENT/PROCESS Skid-tube Machining Thermoforming Large Fab Cross tube Small Fab Finishing Composite Water Jet Prod. Eng. Coord. Rec/Store/Packaging Supplier Engineering Quality Other					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment Design Doc/Data Equip/Tooling Handling/Pre Material Internal Transport Tribal Knowledge LOA Substation Past Expiry Date Misidentified No Re-verification Operator Offset/Setup Supplier Training Use for Testing Poor Information Rushing Product Improvement Process Improvement Manufacturing Process Past Due		FAULT CATEGORY Pressure/Forced Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wave Cuffs Crushing Heat Treat Wave/Twist in Tube Marks/Chatter Temperature/Cure Set-up BOM/Route Broken/Damage/Defect Inspection Incomplete/Unqualified Contamination Countersink Cut Too Short Instructions Incomplete/Unclear Drill Holes Power Loss/Surge Folio/Program Grain Weld Wrong Stock Pulled Out of Sequence Off-set Mislabeled Fit/Function Misaligned/off center Positioned Wrong Outside Dimensions Over/Under tolerance Part Incorrect Part Lost/Missing Part Moved Drawing Finish Misread Turning Sequence							
OTHER :									

Picklist Print

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Page 1

Work Order ID: 146710

146710

Parent Item: D2842-043

D2842-043

Parent Item Name: Step Assembly, LH, 206 Float (PHI)

Start Date: 5/24/2016

Required Date: 6/30/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A NEW ISSUE 16-05-19 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2622-120C		Manufactured	No				Each	72.2360		1			
D2622-120C									**				
Step Extrusion													

Location	Loc Qty	Loc Code
----------	---------	----------

WA003	0.236	
-------	-------	--

130161	0.236	
--------	-------	--

WA004	72	
-------	----	--

140539	72	
--------	----	--

D2734		Manufactured	No				Each	40.0000		2			
D2734									**				
Step End Plate													

Location	Loc Qty	Loc Code
----------	---------	----------

WA003	40	
-------	----	--

134415	30	
--------	----	--

141034	10	
--------	----	--

D3459-1		Manufactured	No				Each	36.0000		2			
D3459-1									**				
Float Step Mounting Plate													

Location	Loc Qty	Loc Code
----------	---------	----------

WA003	36	
-------	----	--

130490	15	
--------	----	--

132719	9	
--------	---	--

134950	12	
--------	----	--

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : _____			
Misidentified ☐		Past Due ☐					

Picklist Print

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Work Order ID: 146710

146710

Parent Item: D2842-043

D2842-043

Parent Item Name: Step Assembly, LH, 206 Float (PHI)

Start Date: 5/24/2016

Required Date: 6/30/2016

Start Qty: 1.00

Required Qty: 1.00

D3459-3

Manufactured

No

Each

34.0000

2

D3459-3

Float Step Mounting Plate

8516-06-07

Location

Loc Qty

Loc Code

WA003

34

129735

2

130491

20

134882

12

Each

135.0000

1

MS20601-AD4W2

Purchased

No

MS20601-AD4W2

Rivet

8516-06-09

Location

Loc Qty

Loc Code

ST308

33

m133577

2

m133922

31

WA003

102

m126075

9

m134134

93

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

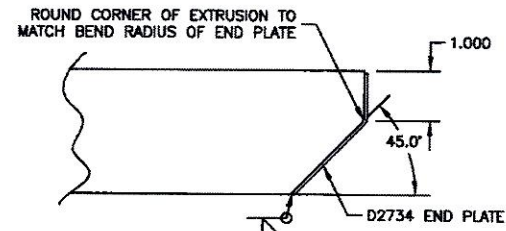
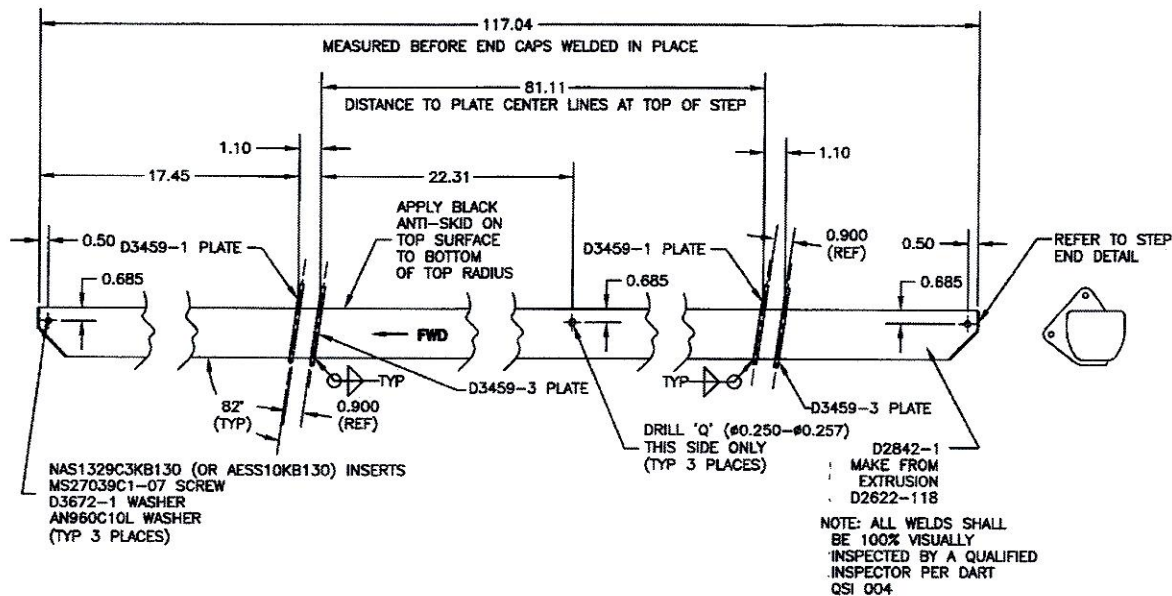
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval 	
Description Work Order Deviation				Disposition					
								Completed By 	
								Lead hand / Supervisor Approval Verification 	
								QC / QA Coordinator Approval 	

Root Cause			FAULT CATEGORY							
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling ☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre ☐	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material ☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport ☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge ☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA ☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation ☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date ☐	☐	Manufacturing Process	OTHER :							
Misidentified ☐	☐	Past Due								

Qty -041	Qty -042	Part Number	Description
X	X	D2842-041	LH FLOAT STEP ASSEMBLY
X	X	D2842-042	RH FLOAT STEP ASSEMBLY
1	1	D2622-118	EXTRUSION
2	2	D2734	END PLATE
2	2	D3459-1	PLATE
2	2	D3459-3	PLATE
3	3	D3672-1	WASHER
3	3	MS27039C1-07	SCREW
3	3	NAS1149C0332R	WASHER (AN960C10L)
3	3	NAS1329C3KB130	INSERT (or AESS10KB130)



TYPICAL STEP END DETAIL
NOT TO SCALE

D2842-041 LH FLOAT STEP ASSEMBLY (SHOWN)
D2842-042 RH FLOAT STEP ASSEMBLY (OPPOSITE)

NOTES:

- 1) MATERIAL: MAKE FROM EXTRUSION D2622
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
APPLY BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D2842-041/-042" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: N/A
- 8) WELD PER DART QSI 004

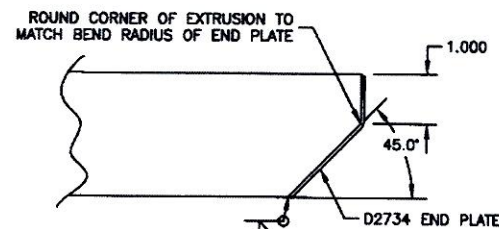
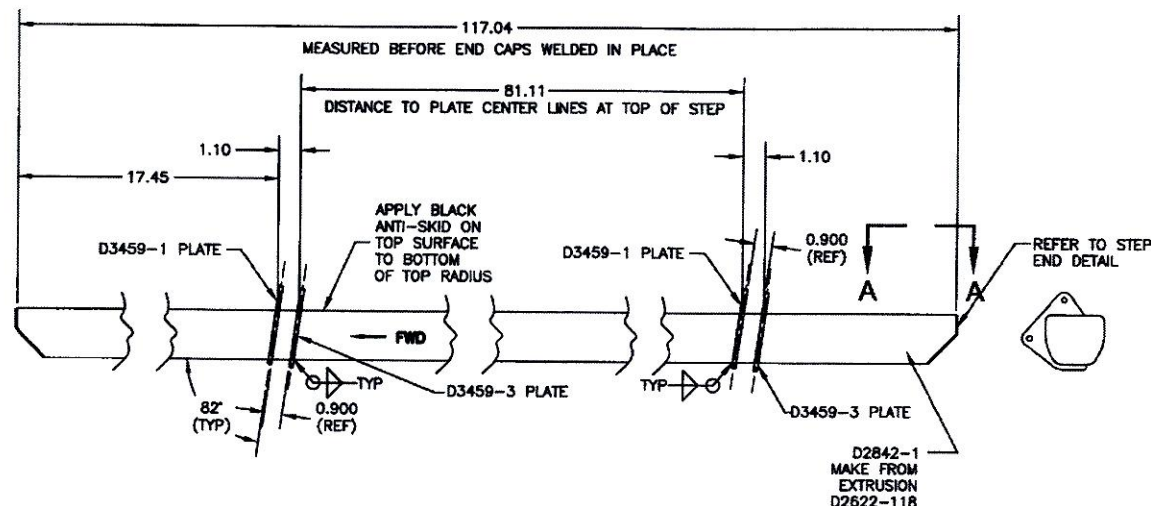
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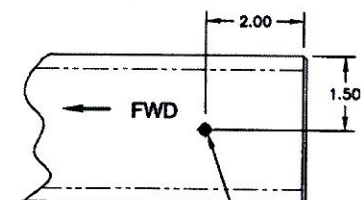
PRELIMINARY # 20605.46

C	ADD -043/-044 (FOR PHI) FORMATTED TO CURRENT STANDARD	DS	16.04.25
B	RE-DESIGN, ADD D3459-1/3	PH	98.10.13
A	NEW ISSUE	KE	98.10.13
REV.	DESCRIPTION	BY	DATE
DESIGN	KE	DART AEROSPACE USA, INC EUGENE, OR	
DRAWN	RF		
CHECKED	AK	DRAWING NO.	REV. C
MFG. APPR.	DD	D2842	SHEET 1 OF 2
APPROVED	DS	TITLE	SCALE
DE APPR.	DS	206/407 FLOAT STEP ASSEMBLY	NTS
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Qty	Qty	Part Number	Description
-043	-044		
X	X	D2842-043	LH FLOAT STEP ASSEMBLY (FOR PH)
		D2842-044	RH FLOAT STEP ASSEMBLY (FOR PH)
1	1	D2622-118	EXTRUSION
2	2	D2734	END PLATE
2	2	D3459-1	PLATE
2	2	D3459-3	PLATE
1	1	MS20601AD4W2	RIVET



TYPICAL STEP END DETAIL
NOT TO SCALE



SECTION A-A
NOT TO SCALE

NOTE: ALL WELDS SHALL
BE 100% VISUALLY
INSPECTED BY A QUALIFIED
INSPECTOR PER DART
QSI 004

D2842-043 LH FLOAT STEP ASSEMBLY (SHOWN)
D2842-044 RH FLOAT STEP ASSEMBLY (OPPOSITE)

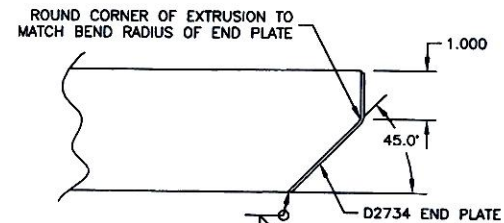
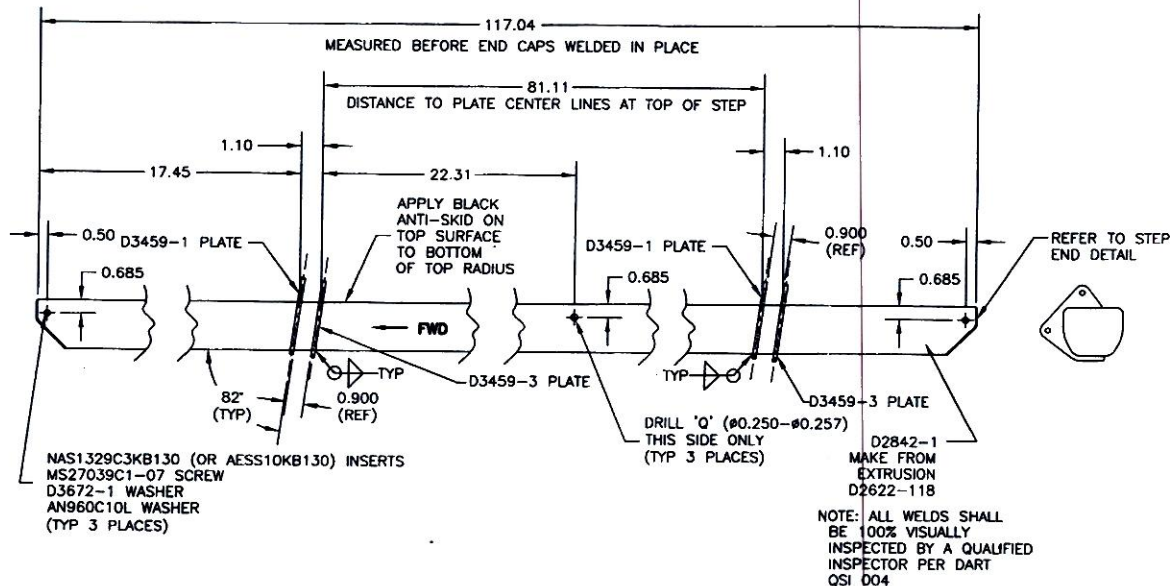
NOTES:

- 1) MATERIAL: MAKE FROM EXTRUSION D2622
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME (REF 4.2.1.3.3) OUTSIDE PER QSI 005 4.2.1
PAINT BLACK PER QSI 005 4.2.2 USING CA8213/F37038 CAMOFLAGE BLACK PER MIL-PRF-05285E TYPE I CLASS H
APPLY BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D2842-043/-044" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: N/A
- 8) WELD PER DART QSI 004

DESIGN	KE	DART AEROSPACE USA, INC	
DRAWN	RF	EUGENE, OR	
CHECKED	AK	DRAWING NO.	REV. C
MFG. APPR.	DD	D2842	SHEET 2 OF 2
APPROVED	DS	TITLE	SCALE
DE APPR.		206/407 FLOAT STEP ASSEMBLY	NTS
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PRELIMINARY # 2016.05.16

Qty -041	Qty -042	Part Number	Description
X	X	D2842-041	LH FLOAT STEP ASSEMBLY
		D2842-042	RH FLOAT STEP ASSEMBLY
1	1	D2622-118	EXTRUSION
2	2	D2734	END PLATE
2	2	D3459-1	PLATE
2	2	D3459-3	PLATE
3	3	D3672-1	WASHER
3	3	MS27039C1-07	SCREW
3	3	NAS1149C0332R	WASHER (AN960C10L)
3	3	NAS1329C3KB130	INSERT (or AESS10KB130)



D2842-041 LH FLOAT STEP ASSEMBLY (SHOWN)
D2842-042 RH FLOAT STEP ASSEMBLY (OPPOSITE)

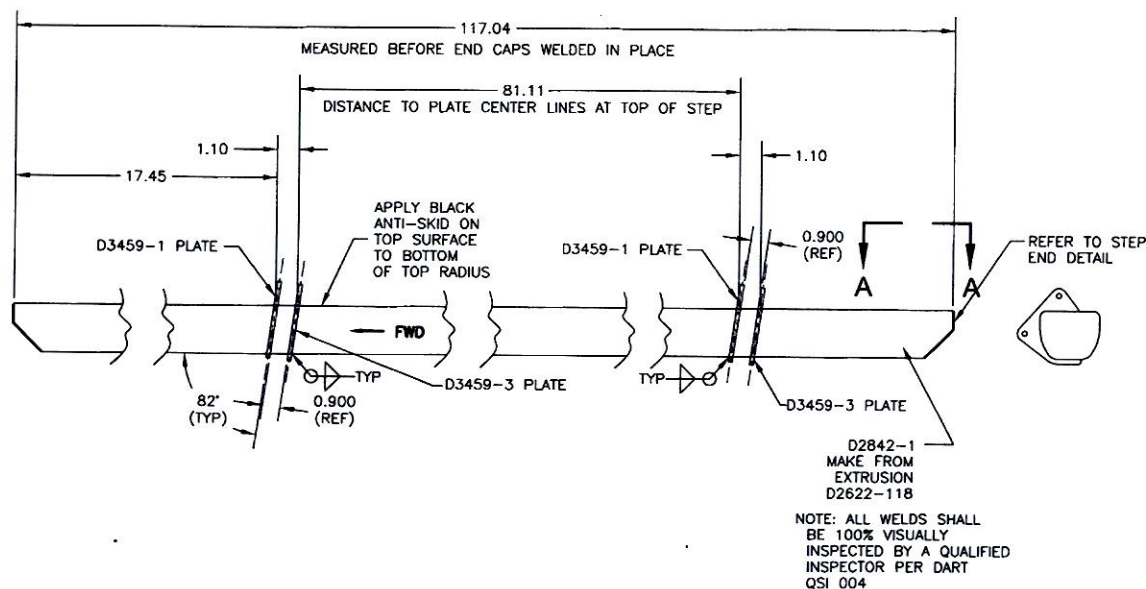
NOTES:

- 1) MATERIAL: MAKE FROM EXTRUSION D2622
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
APPLY BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D2842-041/-042" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: N/A
- 8) WELD PER DART QSI 004

RELEASED
 2016-08-02
 EN 11-620

C	ADD -043/-044 (FOR PHI) FORMATTED TO CURRENT STANDARD	DS	16.04.25
B	RE-DESIGN, ADD D3459-1/-3	PH	98.10.13
A	NEW ISSUE	KE	98.10.13
REV.	DESCRIPTION	BY	DATE
DESIGN	KE	DART AEROSPACE USA, INC EUGENE, OR	
DRAWN	RF		
CHECKED	AK	DRAWING NO.	REV. C
MFG. APPR.	DD	D2842	SHEET 1 OF 2
APPROVED	DS	TITLE	SCALE
DE APPR.	DS	206/407 FLOAT STEP ASSEMBLY	NTS
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Qty -043	Qty -044	Part Number	Description
X		D2842-043	LH FLOAT STEP ASSEMBLY (FOR PHI)
	X	D2842-044	RH FLOAT STEP ASSEMBLY (FOR PHI)
1	1	D2622-118	EXTRUSION
2	2	D2734	END PLATE
2	2	D3459-1	PLATE
2	2	D3459-3	PLATE
1	1	MS20601AD4W2	RIVET



D2842-043 LH FLOAT STEP ASSEMBLY (SHOWN)
D2842-044 RH FLOAT STEP ASSEMBLY (OPPOSITE)

NOTES:

- 1) MATERIAL: MAKE FROM EXTRUSION D2622
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
 PRIME (REF 4.2.1.3.3) OUTSIDE PER QSI 005 4.2.1
 PAINT BLACK PER QSI 005 4.2.2 USING CA8213/F37038 CAMOFLAGE BLACK PER MIL-PRF-05285E TYPE I CLASS H
 APPLY BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D2842-043/-044" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: N/A
- 8) WELD PER DART QSI 004

RELEASED
 2016-08-02

DESIGN	KE	DART AEROSPACE USA, INC	
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CHECKED	AK	DRAWING NO.	REV. C
MFG. APPR.	DD	D2842	SHEET 2 OF 2
APPROVED	DS	TITLE	SCALE
DE APPR.		206/407 FLOAT STEP ASSEMBLY	NTS
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